

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method of manufacturing a semiconductor substrate comprising the processes of:

forming an insulation film on at least a surface of a semiconductor substrate main body;

forming an ion shield member having a predetermined shape on said insulation film; subsequent to forming the insulation film, implanting ions into said semiconductor substrate main body from a side on which said insulation film is formed, to thereby form an ion implantation layer;

removing said ion shield member;

cleaning or smoothing the surface of said insulation film;

laminating said insulation film and a support substrate onto each other; and

separating said semiconductor substrate main body from said support substrate at a portion of said ion implantation layer,

wherein a shape of an outer edge of said ion shield member is tapered, and thereby said ion implantation layer is partly inclined in response to said tapered shape of the outer edge of said ion shield member, so as to prevent separation defect in the semiconductor substrate main body of said support substrate.

2. (Original) A method of manufacturing a semiconductor substrate according to claim 1, wherein the process of separating said semiconductor substrate main body at the portion of said ion implantation layer comprises the process of separating said semiconductor substrate main body at a peak position of an ion concentration in said ion implantation layer.

3. (Original) A method of manufacturing a semiconductor substrate according to claim 1, wherein the process of forming said ion shield member comprises the processes of: forming an ion shield film made of resist or oxide film on said insulation film; and patterning said ion shield film to a predetermined shape to thereby form said ion shield member.

4-8. (Canceled).

9. (Original) A method of manufacturing a semiconductor substrate according to claim 1, wherein a thermally conductive film is buried in the support substrate used in the laminating process.

10-16. (Canceled).

17. (Previously Presented) A method of manufacturing a semiconductor substrate for an electro-optical apparatus, comprising the processes of:

forming an insulation film on a surface of a semiconductor substrate main body;
forming an ion shield member having a predetermined shape on said insulation film;
subsequent to forming the insulation film, implanting ions into said semiconductor substrate main body from a side on which said insulation film is formed, to thereby form an ion implantation layer;

removing said ion shield member;

cleaning or smoothing the surface of said insulation film;

laminating said insulation film and a support substrate onto each other; and

separating said semiconductor substrate main body from said support substrate at a portion of said ion implantation layer in a condition that a thickness of a portion of the semiconductor substrate main body that is designed to form a drive circuit of the electro-optical apparatus is thick and a thickness of a portion of the semiconductor substrate main body that is designed to form an image display region of the electro-optical apparatus is thin,

wherein a shape of an outer edge of said ion shield member is tapered, and thereby said ion implantation layer is partly inclined in response to said tapered shape of the outer edge of said ion shield member, so as to prevent separation defect in the semiconductor substrate main body or said support substrate.

18. (New) A method of manufacturing a semiconductor substrate for an electro-optical apparatus, comprising the processes of:

preparing a pair of a support substrate and an opposite substrate for sandwiching electro-optical substance therebetween;

arranging a plurality of first switching elements in a form of matrix in correspondence with a pixel array, in an image display region of said support substrate; and

arranging a plurality of second switching elements in a peripheral region, which is located around said image display region, of said support substrate and at least partially constituting a peripheral circuit,

wherein a thickness of a semiconductor layer in the image display region constituting said first switching elements is thinner than a semiconductor layer in the peripheral region constituting said second switching elements.